

The background is a light gray color. It features several stylized, overlapping leaf shapes in a slightly darker gray. Some leaves are simple outlines, while others are filled with a lighter shade. There are also a few small, solid gray circles scattered throughout the design.

Urban Creek Restoration and Trail system

Waller Creek Project

Watershed Protection Department, City of Austin

QUESTION:



1.) What does your ideal Urban Creek system look like and how does it interact with a busy Downtown city.

AGENDA:

- About Waller
- History
- Designs and Planning
- Issues and challenges
- Lessons learned
- Questions



WEST AUSTIN

AUSTIN

DOWNTOWN

**waterloo
greenway**

EAST AUSTIN

SOUTH AUSTIN





ABOUT

More development- more people- more more more

HISTORY



PICA 21043 Austin History Center, Austin Public Library

1900 Airplane view of vicinity of Waller Creek
& East 1st Street



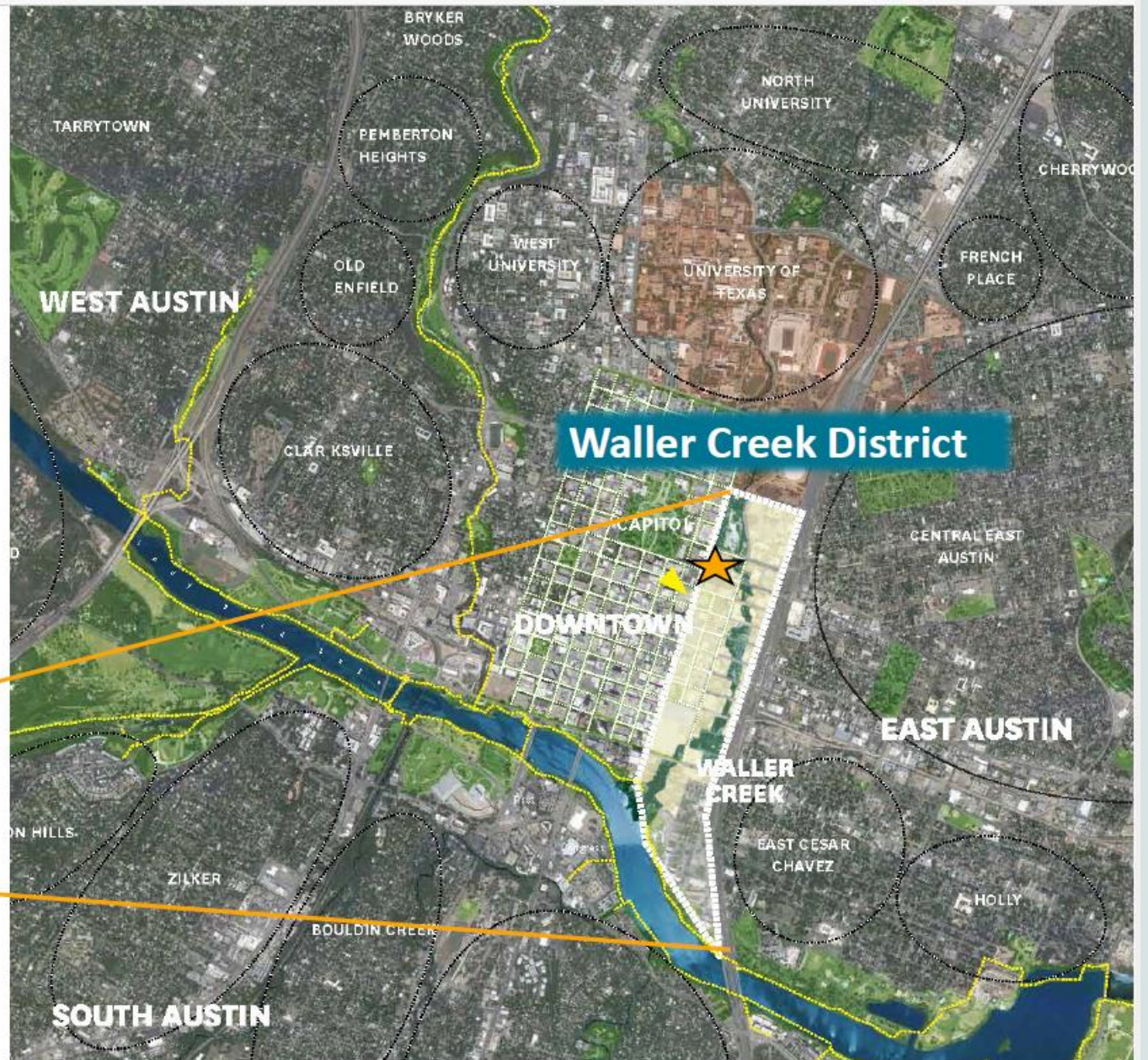
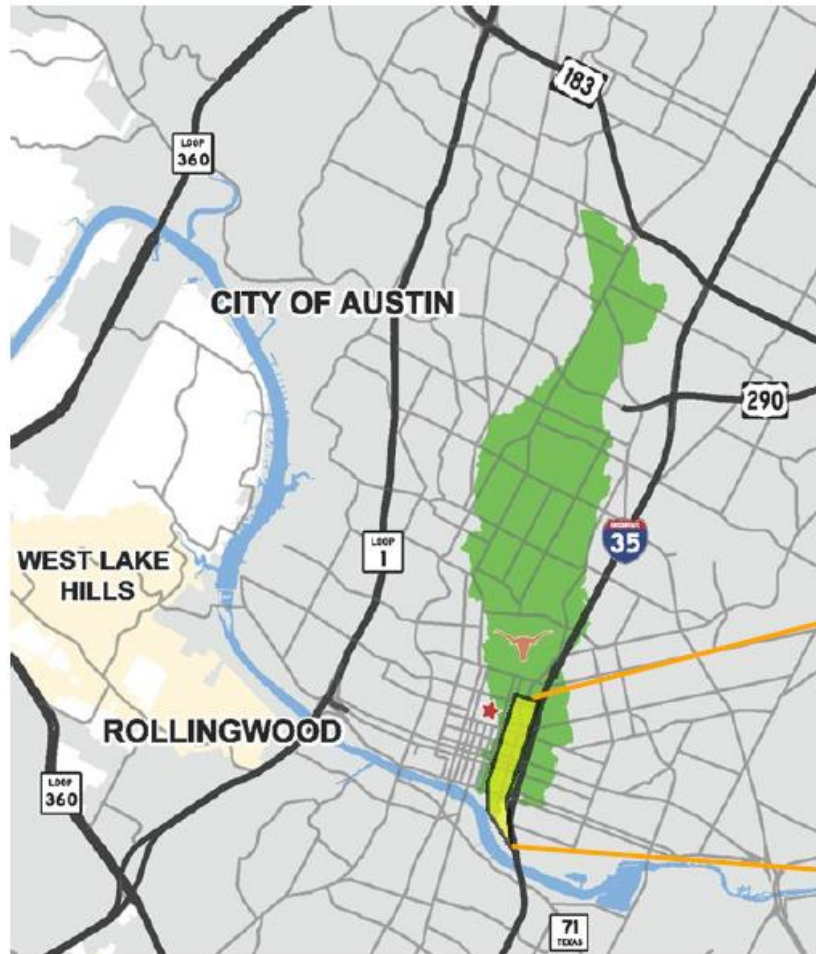
C03659, Austin History Center, Austin Public Library

1920 Waller Creek at 6th Street

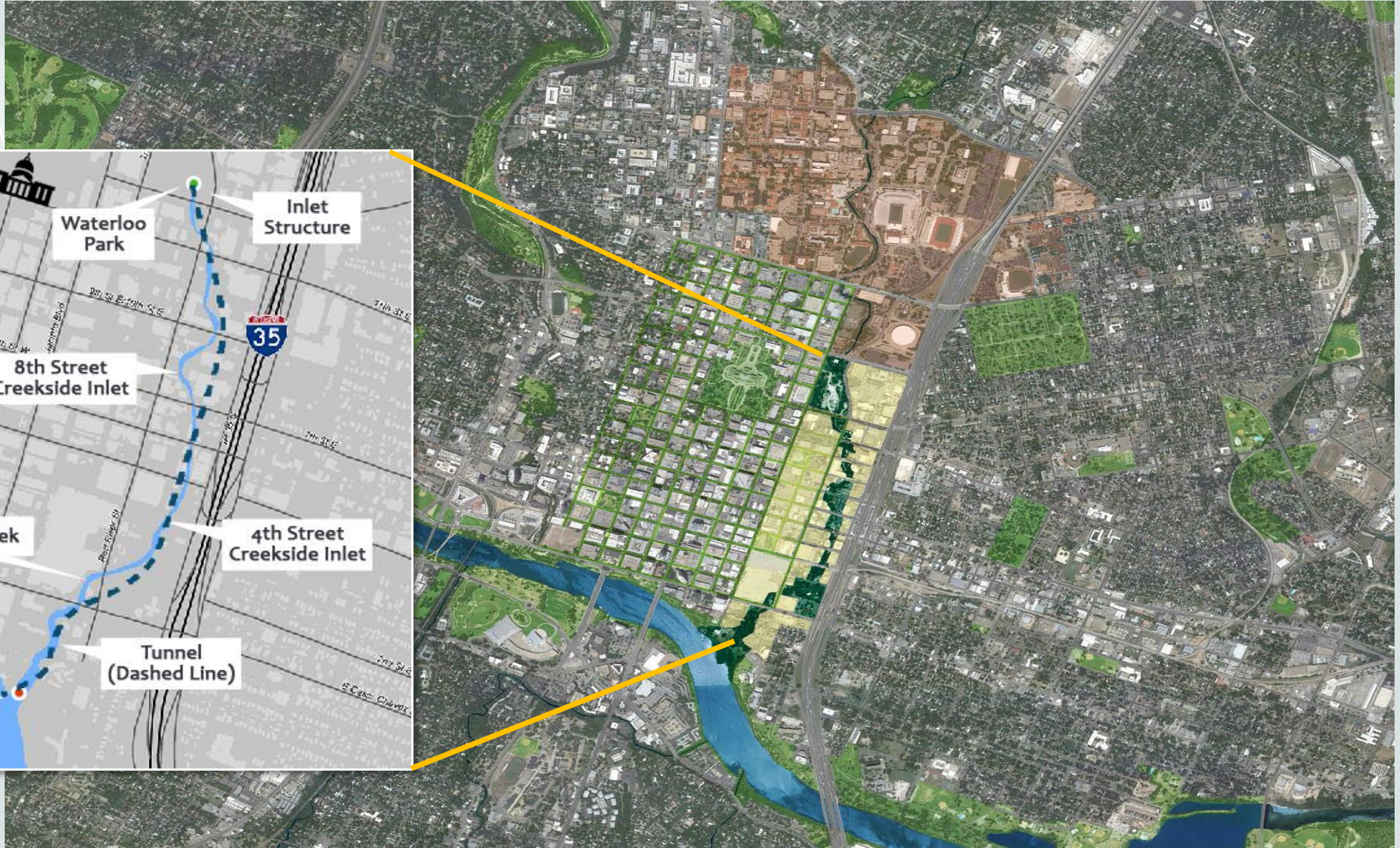
Flooding
Erosion
Pollution

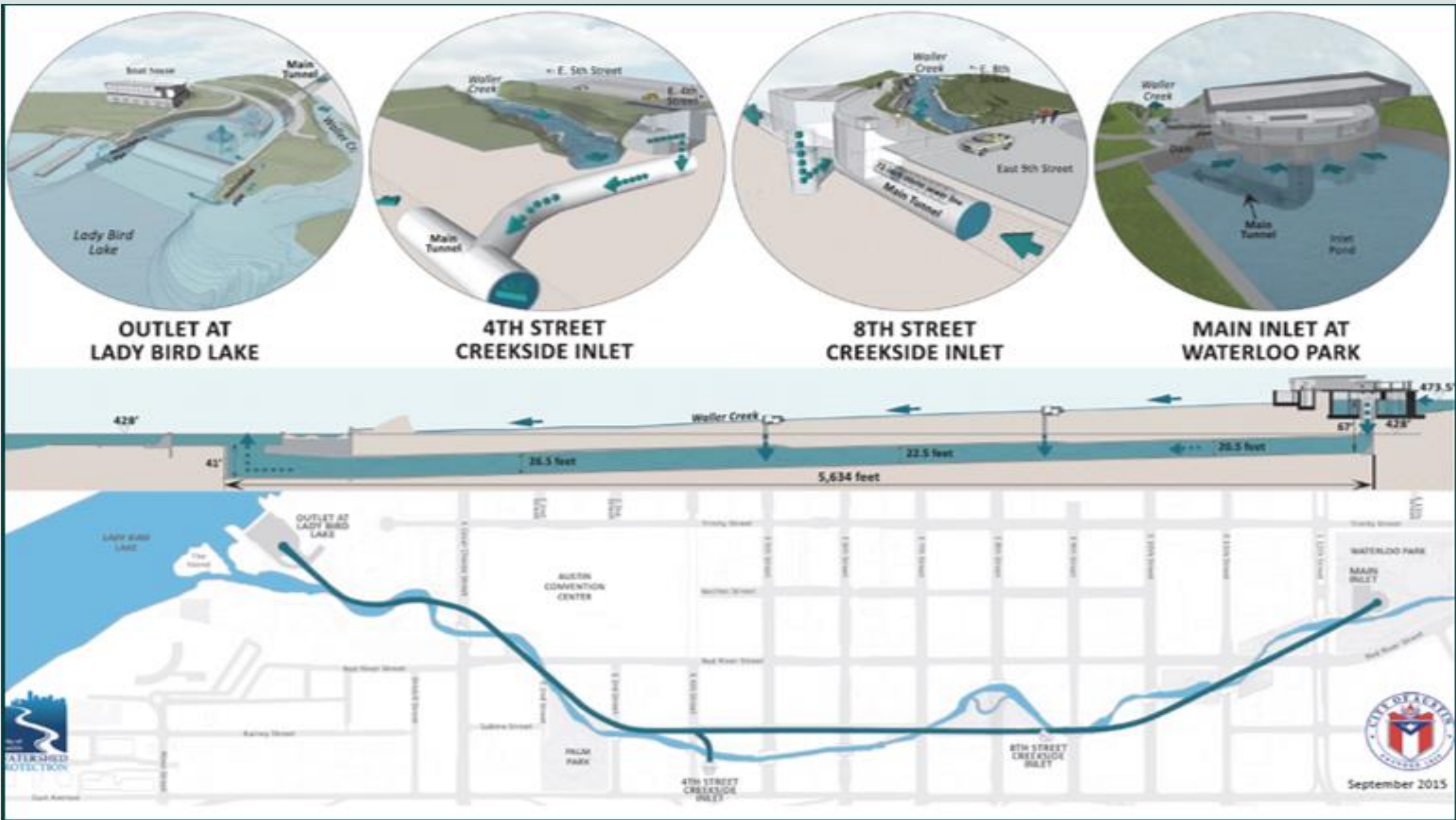


Waller Creek Watershed



Waller Creek Tunnel

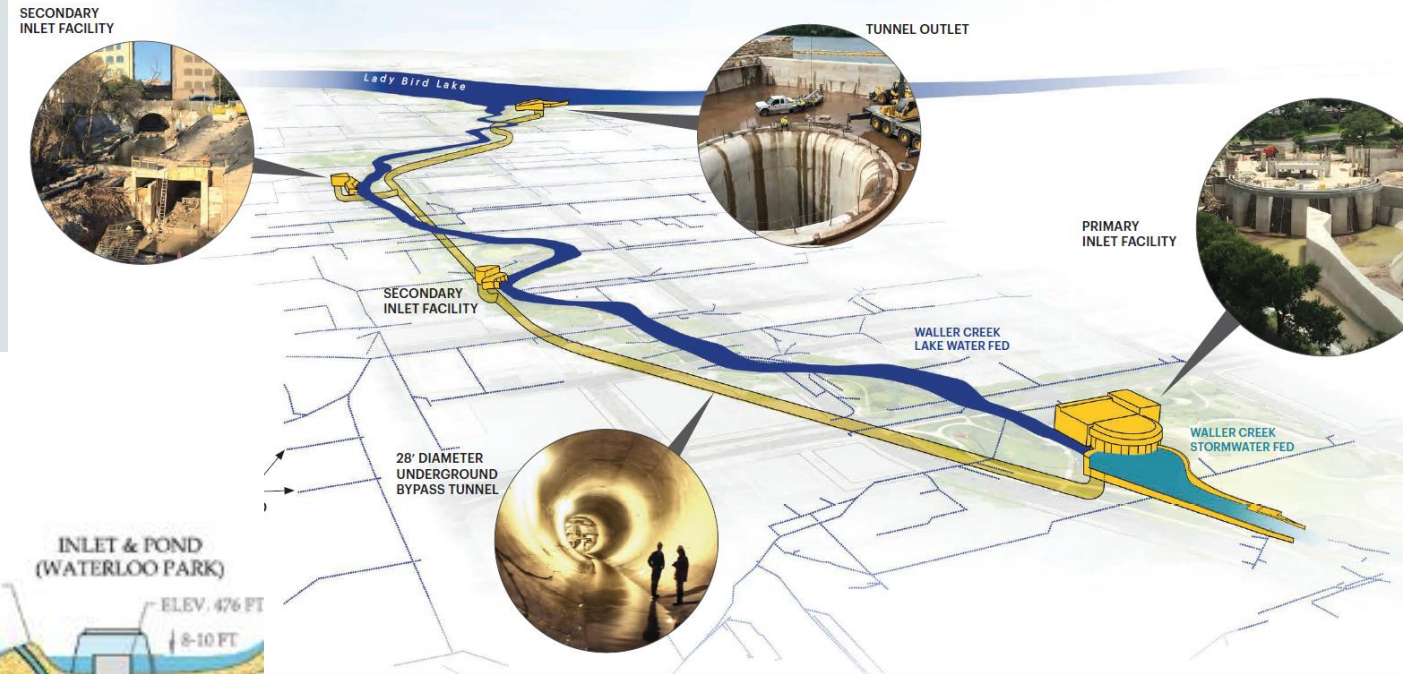
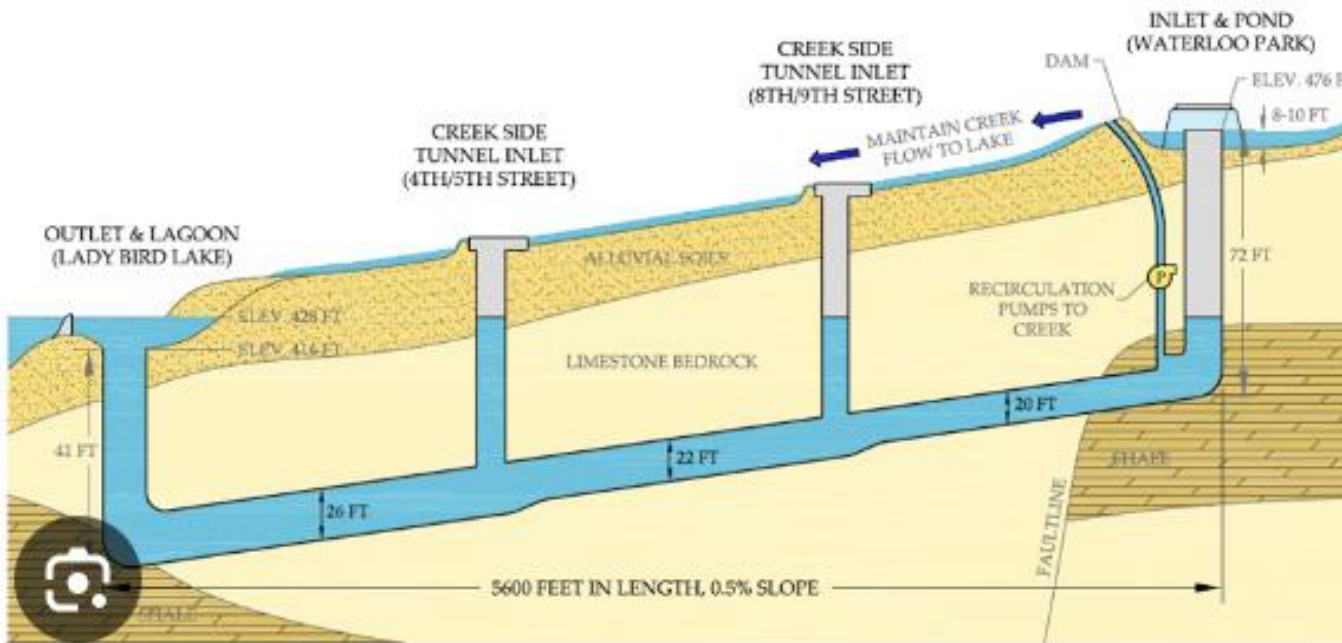




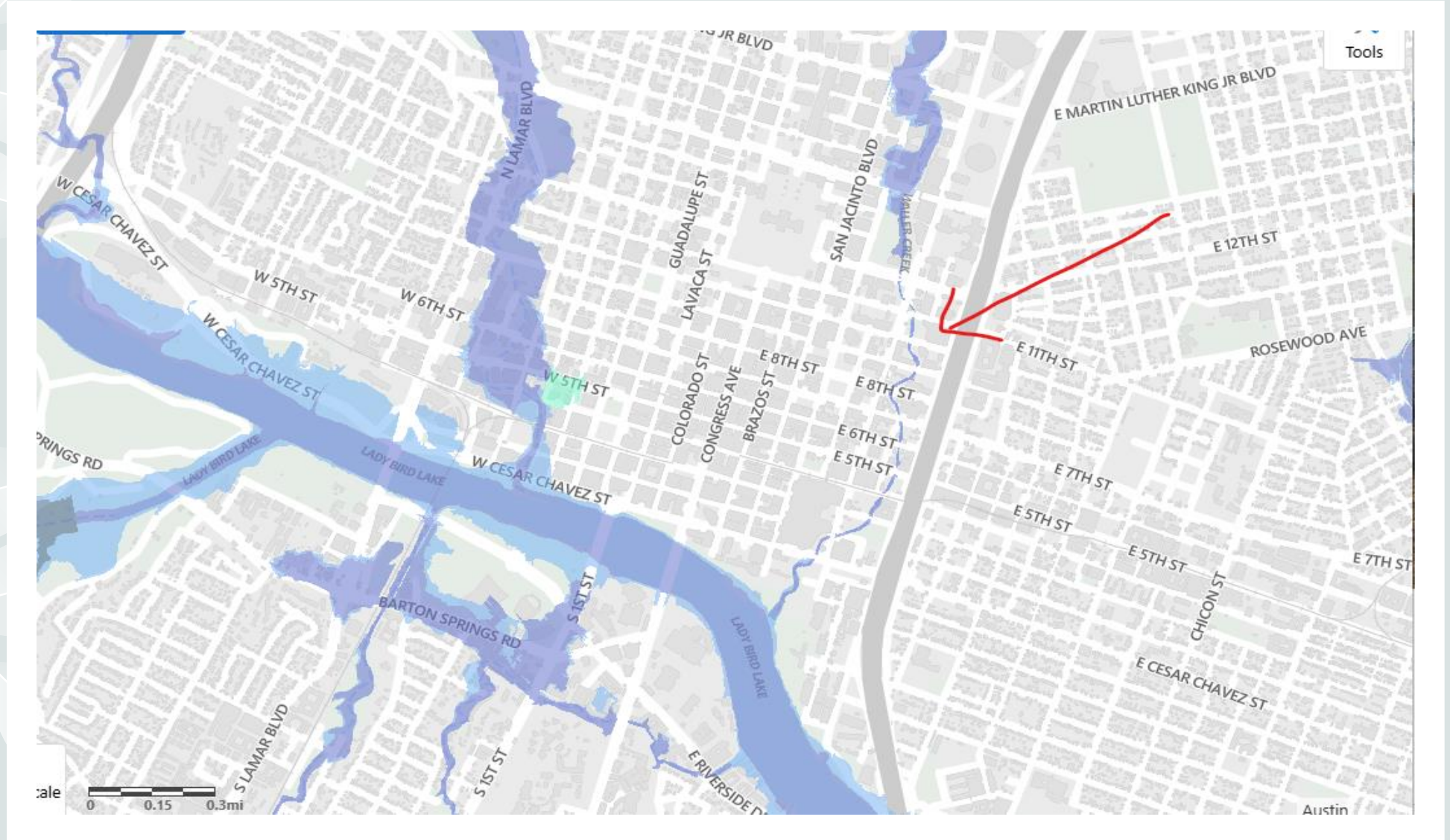
Waller Creek tunnel

Capturing the Opportunity of the Waller Creek Tunnel

WALLER CREEK TUNNEL PROJECT
CONCEPTUAL PROFILE
(NOT TO SCALE)

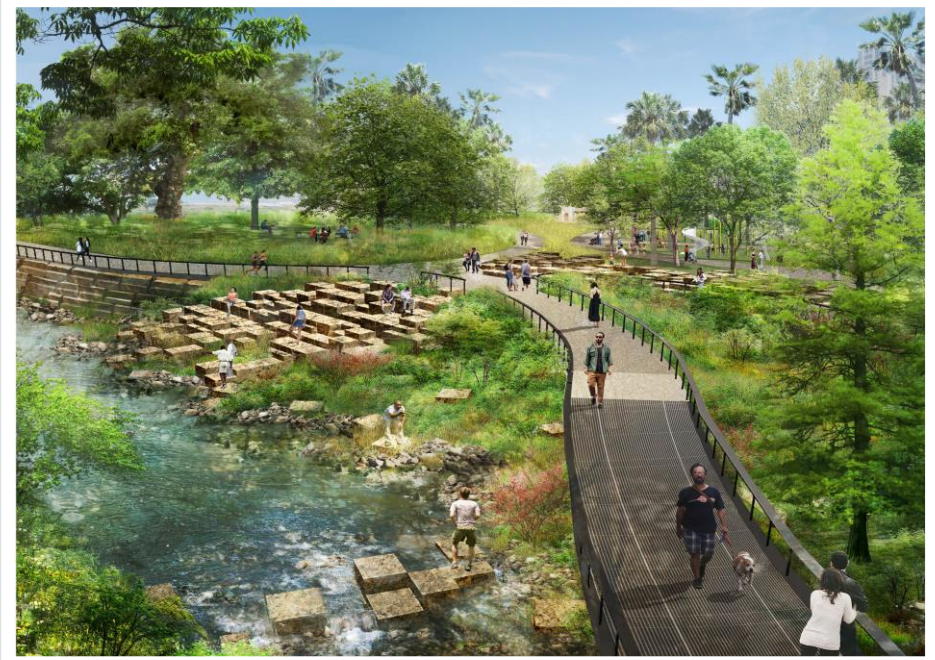


What Waller is now- how the tunnel incorporated new development



Design and Plans

for a revitalized urban creek and park system



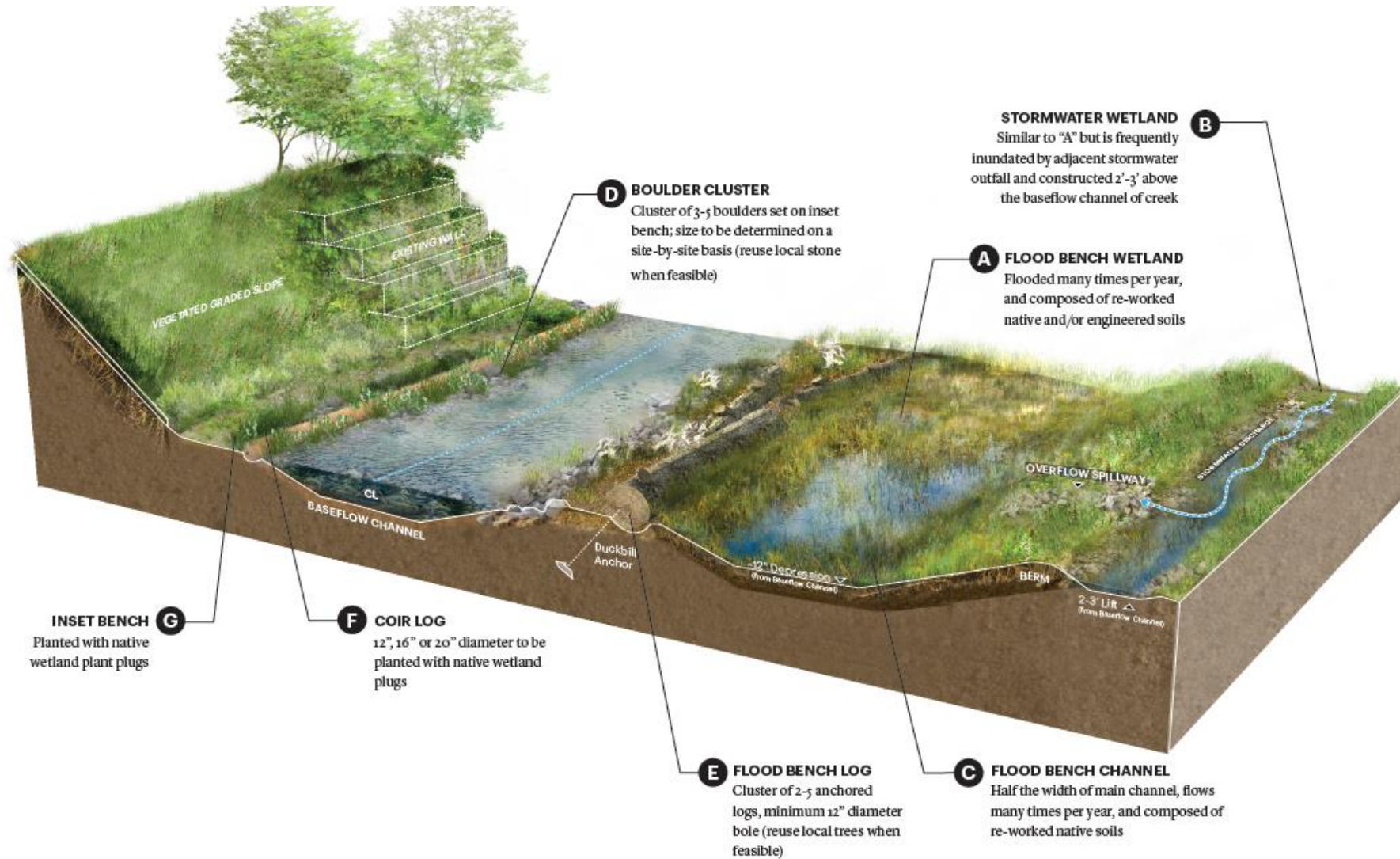




How to make a creek work naturally in an urban setting



RIPARIAN AREA, FLOOD BENCHES & AQUATIC HABITAT



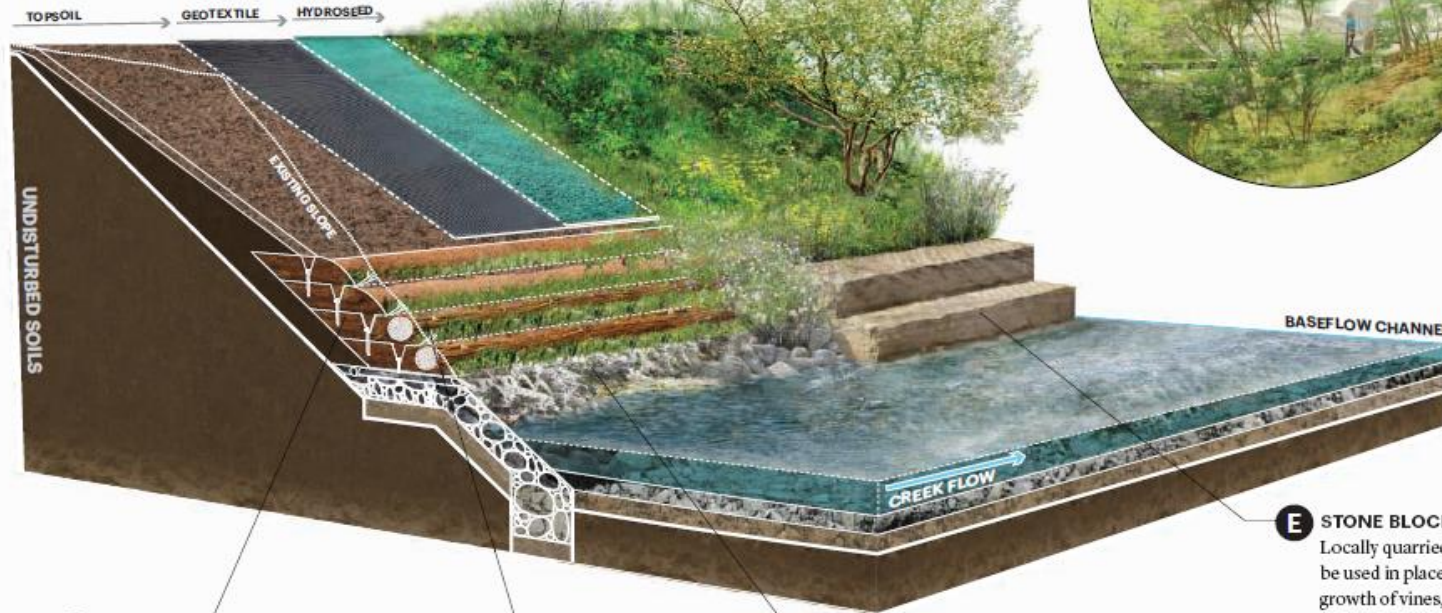
HYDROMULCHING/SEEDING
Applied above baseflow with fast-growing, deep-rooted perennial natives & cover

F

A

VEGETATED GRADED SLOPE

Re-worked native soils graded to 2.5:1 or flatter (where feasible) and planted with groundcover, understory and upper story vegetation (see right)



C

SOIL LIFTS

6"-12" nondegradable geotextile planted with aggressive native mix. Composed of re-worked native and/or engineered soils

D

LIVE STAKES

0.5"-3" diameter, 1.5'-5' long, locally harvested, 2-5 yr old branches installed so tip reaches very moist or wet soil. Recommended downstream of Cesar Chavez only.

B

RIP RAP TOE

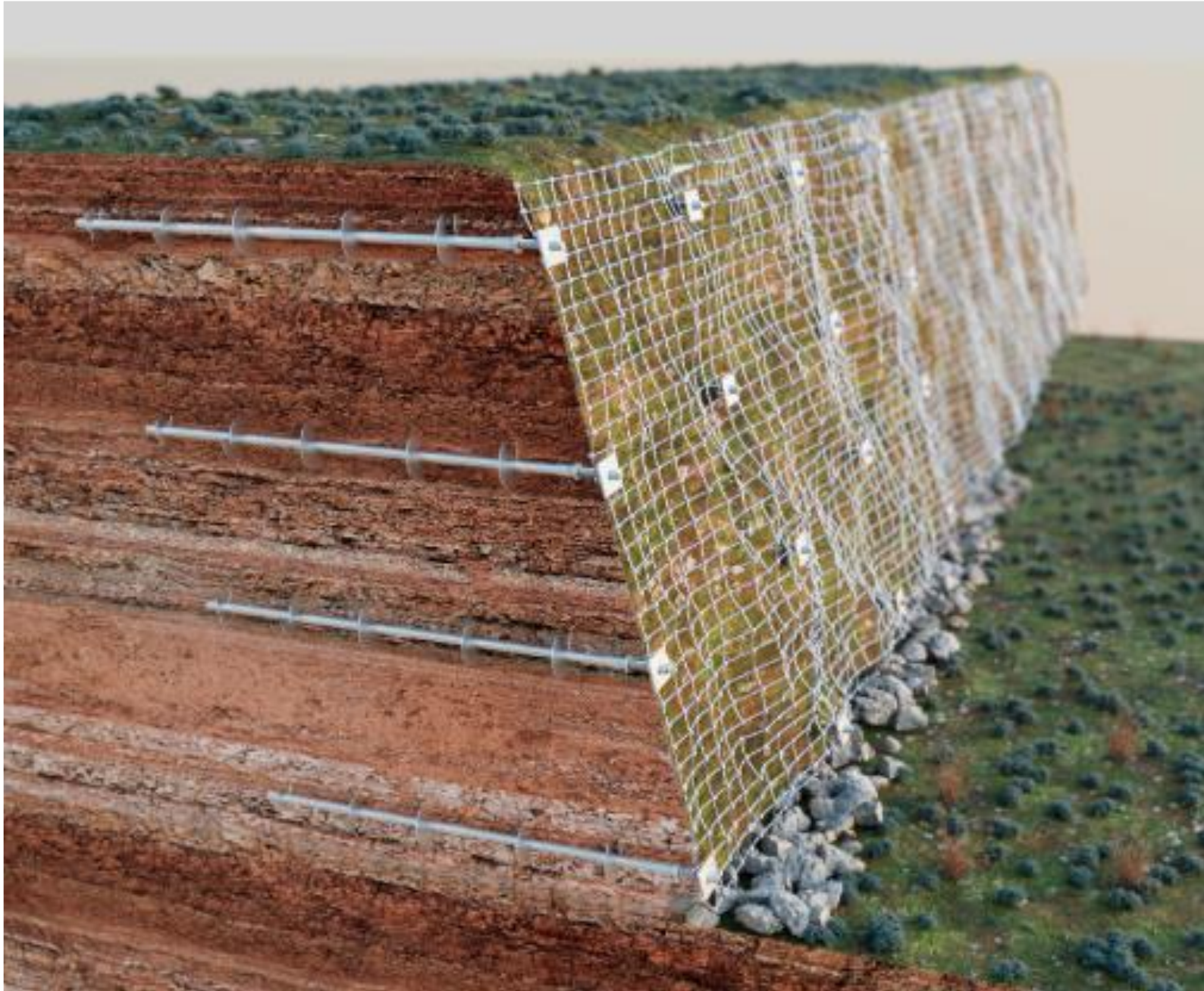
Natural or salvaged, angular boulders 18" - 24" with a specific gravity of ≥ 2.4

E

STONE BLOCK WALL

Locally quarried or salvaged, can be used in place of rip rap and for growth of vines, ferns, moss, and other herbaceous plants

Working
with
failed slopes



SOIL NAIL
WALL

Current construction



ISSUES & CHALLENGES AHEAD



- Slope stabilization-
property owners and
easements
- Creek setbacks

LESSONS LEARNED

Lessons	Recommended Action
Bid item quantity	be sure to triple check bid quantities prior to bid
uncovering issues such as slope stabilization after excavation	be sure site excavation and on site assesments are thorough on slopes
uncovering unknown utilities- site exploration	get a thorough survey with Lidar and communicate with utilities
Designers get water meters set up prior to construction	set up along with permitting phase so there is no mark up from Contractors
Estimates of work from Consultant need approved prior to moving fwd w change orders	We have a LASI, SKL, CO process- need to refer to it for changes
Having a bid build contract process, not design build	keep in mind that the area must be assesed and planned for at the beginning to eliminate scope and cost creep
reduced scope at beginning of bid for desired price- do NOT add back in	if designs are value engineered pout, do not add back in unless more funding has come in
permitting prcoess	make sure ALL permits are attained prior to construction bid
site exploration-proper boring for soil and bed rock depth	proper soil boring
Email or written confirmation	when decision are made or answers to questions have been confirmed get in writing via email to all partys involved to iliminate repeat tasks or confusion

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Thank you

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